1. Determine the midrange, range, mode, median, mean, IQR, and sample standard deviation for the data give below.

   (a) Data: 2, 2, 3, 3, 3, 4, 6, 6, 6, 6, 8, 8, 8

   (b) Data: 3, 5, 1, 8, 0, 7, 3, 6, 5, 2

2. Your Cultural Anthropology instructor offers you the opportunity to assist her by analyzing some data that she collected between September 25, 1986 and October 18, 1987 regarding the male residents of the Gwaimasi Village in the New Guinea rain forest. Delighted that you can put your knowledge of statistics to use, you accept her offer, and she gives you the data. Examining the data, you find that, for this study period, she has collected information about fifteen (15) male members of the village together with their age, their status in the village, the number of nights that each male spent in the hunting area, and the amount, in kilograms, of food, Pig, Cassowary, Spear Fish, or Hook Fish, that each caught.

Name	Age	Status	Number of Nights in Hunting Area	Pig	Cassowary	Spear Fish	Hook Fish
Bisaeo	45	Married	327	10.9872	0	8.0769	2.4852
Gugwi	45	Married	363	1.452	0	54.0507	13.5762
Wodai	45	Widower	43	0	0	0	12.1174
Mamo	40	Married	310	169.849	107.26	11.687	3.379
Simo	35	Married	295	64.9885	6.49	3.3335	21.8005
Gwase	28	Bachelor/Married	346	99.9594	11.3834	10.3108	12.0062
Tufa	25	Bachelor/Married	155	0	0	2.2475	2.666
Gwuho	25	Bachelor	136	6.2424	0	1.9856	7.0856
Filifi	25	Bachelor	274	289.6728	9.4256	30.688	0.9042
Sinio	22	Married	267	169.9188	43.8681	52.1985	8.01
Maubo	20	Youth	362	32.4714	3.258	16.2176	27.9102
Dogo	15	Youth	314	42.7354	0	11.8064	14.8522
Hegogwa	15	Youth	122	0	0	3.782	15.8722
Gawua	10	Child	263	0	0	0	2.0251
Okre	3	Child	355	0	0	0	0

   (a) Determine the midrange, range, mode, median, mean, and IQR for the age for the male residents.

   (b) What is the standard deviation for the age of the male residents?

   (c) Determine the midrange, range, mode, median, mean, and IQR for the number of nights that the male residents spent in the hunting area.

   (d) What is the mode for the status of the male residents?

3. A random sample of thirty-six (36) married couples who had been married for seven years was surveyed regarding the number of children they had. The results of the survey are given below.

   0   0   3   1   2   3   4   2   3   2   2   4

   3   4   3   3   0   3   0   3   3   3   2   1

   1   2   1   3   0   3   2   1   3   4   1   3

   (a) Determine the midrange, range, mode, median, mean, and IQR for the number of children.

   (b) Determine the standard deviation for the number of children.

4. For one of your STAT 117 Introduction to Statistics assignments, you decide to do a comparison of textbook prices. You collect the following data regarding the prices for selected course textbooks available at the Framingham State University bookstore and a popular online bookstore. When the manager of the bookstore finds out about the information that you have collected (s)he asks you to determine the mean and standard deviation for various groups of these textbooks.

Type	College Bookstore	On-Line Bookstore
Chemistry	93	94
Classic Tale	10	8
English Anthology	47	49
Calculus	76	94
Biology	87	81
Statistics	8	6
Dictionary	24	17
Style Manual	13	11
Art History	66	46

(a) Determine the midrange, range, mode, median, mean, IQR, and sample standard deviation for the prices for the *non-science/non-mathematics* textbooks for the **(i)** *online bookstore.* **(ii)** *college bookstore.*

(b) Determine the midrange, range, mode, median, mean, IQR, and sample standard deviation for the prices for the *science/mathematics* textbooks for the **(i)** *online bookstore.* **(ii)** *college bookstore*.

(c) Determine the midrange, range, mode, median, mean, IQR, and sample standard deviation for the prices for the textbooks for the **(i)** *online bookstore.* **(ii)** *college bookstore*.

5. For your summer internship with *the Zoological Society of San Diego*, you are asked to analyze data for twenty (20) of the mammals being studied by the Society. For your analysis, you obtain information for the gestation period, in days, the life span, in years, determining both the average life span and the maximum life span, and the average speed, in miles per hour, for these mammals as well as if the mammals are considered to be wild or considered to be predators.

Mammal	Gestation Period	Average Life Span	Maximum Life Span	Average Speed	Wild	Predator
Rabbit	31	5	13	35	No	No
Chipmunk	31	6	8	10	Yes	No
Kangaroo	36	7	24	40	Yes	No
Deer	201	8	20	30	Yes	No
Pig	112	10	27	11	No	No
Squirrel	44	10	23	12	Yes	No
Giraffe	425	10	34	32	Yes	No
Donkey	365	12	47	40	No	No
Zebra	365	15	50	40	Yes	No
Elk	250	15	27	45	Yes	No
Horse	330	20	50	48	No	No
Elephant	660	35	70	25	Yes	No
Hippopotamus	238	41	54	20	Yes	No
Opossum	13	1	5	7	Yes	Yes
Fox	52	7	14	42	Yes	Yes
Cat	63	12	28	30	No	Yes
Dog	61	12	20	39	No	Yes
Cheetah	93	14	20	70	Yes	Yes
Lion	100	15	30	50	Yes	Yes
Grizzly bear	225	25	50	30	Yes	Yes

(a) Determine the midrange, range, mode, median, mean, and IQR for **(i)** gestation period, **(ii)** maximum life span, **(iii)** average life span, and **(iv)** average speed.

(b) Determine the mean and standard deviation for the **(i)** gestation period, **(ii)** maximum life span, **(iii)** average life span, and **(iv)** average speed for the mammals *considered to be predators*.